

FOOD & BABIES

Pregnancy and the first year of life

THIS IS A BOOK ABOUT FEEDING YOUR BABY. IT IS INTENDED AS A GUIDE TO NUTRITION FOR YOU AND YOUR BABY UNTIL THE END OF THE FIRST YEAR AFTER BIRTH. IT IS A BOOK FOR YOU TO KEEP AND USE WHENEVER YOU NEED. TO HELP YOU GET THE NECESSARY INFORMATION IT IS DIVIDED INTO FIVE SECTIONS WHICH RELATE TO DIFFERENT STAGES OF PREGNANCY AND INFANCY.

HEALTHY EATING BEFORE & DURING PREGNANCY

Planning a healthy baby starts before conception. New research now suggests that the mother's eating habits before conception play an important role in the baby's health both after birth and in the years ahead. Eating healthy food before pregnancy will give your body a good store of nutrients for your baby to draw on – giving the baby the best start in life. Healthy eating will also keep you feeling well and keep your energy levels up, allowing you to enjoy your pregnancy.

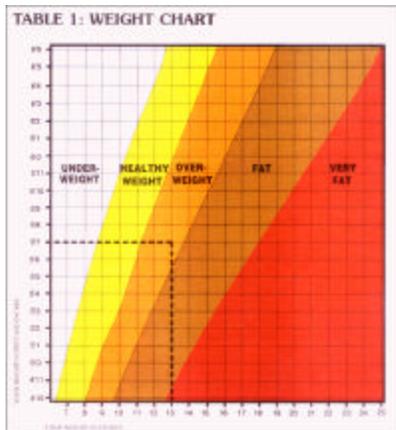
PREPARING FOR PREGNANCY

Eating for a healthy baby before you become pregnant

- Three to four months before conceiving, it is a good idea to look carefully at what you are eating. Use the Food Pyramid on page 10 as a guide. Check how many servings from each shelf you are having daily and how these compare with the recommended number of servings. If you are having too little or too much from any particular shelf, gradually make

small changes over the next few weeks and months.

- Twelve weeks before becoming pregnant, begin taking a folic acid supplement – see the folic acid tips.
- Reach or maintain a healthy body weight for your height. If you need to lose or gain weight (see table 1) do so gradually, i.e. 1-2 lbs per week. Avoid crash dieting or fad weight reducing diets. These may be unbalanced and may not provide you with all nutrients you need for a healthy pregnancy.



Healthy Lifestyle Changes

- You are strongly advised not to smoke during pregnancy.
- If you smoke when pregnant, your baby smokes too.
- Pregnant women who smoke have an increased risk of miscarriage, of having a stillborn baby or of having a low birth weight baby.
- If you smoke, use pregnancy and your baby's health as an Excellent motivation to stop.
- Ideally it is best to avoid alcohol during pregnancy especially During the first three months. Results show that a pregnant woman who drinks excessively is risking the health of her unborn child as well as her own. If you decide to drink while pregnant, gradually reduce your alcohol intake to 1-2 drinks on any occasion. If you normally drink spirits, try to switch to drinks such as wine or beer which have a lower alcohol content. Don't drink on an empty stomach.
- If you are using an oral contraceptive pill, it is advisable to come off the pill, using an alternative barrier method of contraception for at least 3 months before conceiving, because the pill can alter body levels of some nutrients, particularly vitamins B², B , C, folic acid and zinc.
- If you are uncertain, check with your doctor before taking any medication.

Folic acid tips

Folic acid (or folate) is a B group vitamin, and like other vitamins, cannot be made in the body. Research has shown that folic acid can reduce the risk of some birth defects known as Neural Tube Defects (NTDs) e.g. Spina Bifida.

- It is now recommended that **all women of childbearing age need considerably more folic acid in their diets.**
- All women planning to become pregnant are advised to take an additional 400 micrograms (0.4 milligrams) of folic acid daily prior to conception and during the first twelve weeks of pregnancy. There are four ways to increase your intake:

Eat more folic acid/folate-rich foods –Fruit and vegetables, especially green leafy vegetables – including potatoes. (Bread and milk also provide a reasonable amount of folate in the diet because they are taken regularly).

Eat more foods fortified with folic acid (breakfast cereals, breads and milks which are fortified – read food label for details).

Take folic acid supplements (folic acid only – not a multivitamin supplement).

Have a combination of these.

- If you have not been taking folic acid supplements, but suspect that you may be pregnant, you should start supplementation at once and continue until the 12th week of pregnancy.
- If you have already had a baby with a NTD, you are strongly advised to consult your doctor before planning another pregnancy.
- For more information on neural tube defects please read "*What every woman needs to know about Neural Tube Defects*", available from the **Health Promotion Unit**

Did you know that healthy eating during pregnancy is one of the best things you can do to give your baby a healthy start?

If you have followed the '*Preparing for Pregnancy*' guidelines, then you are well on the way to healthy eating.

But if you find you are pregnant before you have had time to prepare, don't worry, as there is still plenty of time to make healthy changes to your eating habits. Check out the Food Pyramid and try to have the recommended number of servings for pregnancy every day. Start immediately on a folic acid supplement.

Don't fall into the trap of eating for two. It is the **quality** rather than then the quantity of food that counts ! In practice the best guide to your energy needs is the rate at which you are gaining weight. More about this later, but as a general guide about 1lb per month for the first 4 months as usual. Remember that most of the weight will be put on in later pregnancy.

During the early weeks of pregnancy it is quite common to feel

tired. It is important to try to rest as much as possible. Do try to take some regular exercise, this will help to keep you fit during pregnancy.

Food Pyramid

To help you plan a healthier diet use the Food Pyramid on pages 10 and 11 as a guide. Basically, the Pyramid shows the balance of food needed for a healthy diet, with most of your food intake coming from the bottom shelves of the Pyramid. Each represents one serving and examples of servings are given. Extra requirements for pregnancy are indicated in red. Compare your eating habits to the Food Pyramid and make any necessary changes.

Special Considerations During Pregnancy

Protein

Protein is needed for body building and making more blood cells. Good sources of protein include lean meat, fish, chicken, eggs, milk, cheese, yogurt, and also pulse vegetables such as peas, beans and lentils. The average Irish diet supplies more protein than we actually need and so it is usually not necessary to increase your intake of protein rich foods during pregnancy. Three servings from the meat, fish and alternatives group will provide all the protein you need.

Calcium

Calcium is needed for the development of healthy bones and teeth for mother and baby. Milk, cheese and yogurt are the richest sources. Other foods which contain calcium include tinned fish with soft bones (e.g. sardines), bread and green vegetables such as broccoli, cabbage and sprouts. Low fat milks contain as much calcium as full/whole fat milks and can be used during pregnancy. Ensuring you have sufficient calcium is very important to help reduce the risk of osteoporosis (brittle bones) in later life. If you exclude dairy product, or include only small amounts in your diet, check with your dietitian or doctor as you may need to take a calcium supplement.

Iron

Iron is necessary for healthy blood. The requirement is increased during pregnancy. This requirement is met by

- better absorption by the body
- adequate intake from food

To ensure you get enough iron from your food, particularly if you have a history of anaemia (low blood iron), include lean red meat, fish and poultry in your eating plan regularly. The iron from these foods is well absorbed. Try to choose lean red meat 3-4 times a week. Other sources of iron include fortified break-

fast cereals, beans, eggs, bread and green vegetables. The iron from these foods is not as well absorbed. If foods containing Vitamin C are taken at the same meal, the absorption of iron is improved. (See page 14 for foods rich in Vitamin C).

Avoid drinking strong tea or coffee, particularly at meal times, as these may prevent your body absorbing iron from your foods. If considered necessary, you may be prescribed iron tablets by your doctor.

Liver is an excellent source of iron. There is some evidence to suggest that liver, eaten in excessive amounts during pregnancy, may contain large doses of vitamin A which could damage a developing baby. If eaten, have small portions such as 2-3 oz a week.

Vitamins During Pregnancy

Vitamins are needed in small amounts by the body to help keep it running in peak condition. They are especially important during pregnancy. Fruit and vegetables are considered a very concentrated source of vitamins (vitamin A, C, E and folic acid in particular) and you should choose at least 4 or more servings every day. Choosing a well balanced diet from a variety of foods will provide all the vitamins you need. Vitamin supplements during pregnancy should only be taken on the advice of your doctor.

Vitamin C

Vitamin C helps the body absorb iron from foods and is needed for healthy skin and connective tissue, and may help to prevent against certain cancers in later life. Good food sources include fruits and fruit juices (e.g. orange, kiwi and grapefruit), currants, tomatoes, potatoes and dark green leafy vegetables. Try not to overlook vegetables as this destroys Vitamin C. Do not add bread soda.

Vitamin D

This helps your body absorb calcium from foods. Dietary sources include oily fish (e.g. tuna, salmon, herring, sardines), whole milk fortified milk, margarines, cheese, eggs and fortified breakfast cereals. Your body can make vitamin D from sunlight so you should try to get outdoors daily.

Folic Acid

This vitamin is particularly important both before and during pregnancy (see folic acid tips page 8). It is essential for the formation and healthy growth of cells in the body.

Good food sources include dark green leafy vegetables (e.g. cabbage, broccoli, Brussels sprouts, spinach, cauliflower), yeast and beef extracts, oranges, bananas, wholegrain breads and cereals, and milk and dairy products. Some breads, breakfast cereals and milks are fortified with, or have added, folic acid.

Check labels.

Remember, folic acid can be destroyed in the cooking process. Vegetables should be cooked for a short time only, in as little water as possible. Better still, cook your vegetables in a microwave, steamer, or stir fry them.

How Much Weight Should I Expect To Gain During Pregnancy?

There is no hard and fast rule. In practice, this really depends on your weight **before** you became pregnant. First check your weight on page 7.

- If you were at a healthy weight you should expect to gain 11½ -16kg or 25-35 lbs.
- If you were below your ideal body weight you should gain 12½ -18 kg or 28-42 lbs.
- If you were above your ideal weight you should gain 7 - 11½ kg or 14-21 lbs.
- If you are concerned about your weight, talk to your doctor or dietitian.

(Source: Nutrition during Pregnancy, 1990: Institute of Medicine. U.S.A.)

If you find you are gaining weight too quickly, cut down on high fat or fried foods such as butter, margarine, chips, sweets, chocolate, biscuits, cakes and crisps. Limit fizzy drinks and alcohol. All these foods are high in calories and low in nutrients. Use a low fat spread or low fat butter and low fat milk.

Do not try to lose weight when pregnant.

Some Food Related Problems.

Nausea & Heartburn

Nausea may be a problem during the early stages of pregnancy while heartburn is experienced frequently towards the end. The following suggestions should help relieve symptoms:

- Eat dry foods e.g. dry toast, plain biscuits.
- Wait a while after eating, before taking any fluids.
- Eat frequent small meals or snacks rather than larger meals.
- Avoid heavy or fatty meals, particularly at night.
- Avoid spicy or highly seasoned foods.
- Relax at mealtimes.
- If particular foods give you heartburn, avoid them for the present
- Consult your doctor or dietitian if you are avoiding several foods.

Constipation

The following advice should help to relieve symptoms:

- **Fibre.** Include plenty of fibre-rich foods such as wholemeal breads, wholegrain breakfast cereals, fruit, vegetables, pulses, wholegrain rice and wholemeal pasta.
- **Fluids.** Drink at least 10 cups per day (including water, fruit juice, milk, tea and coffee).
- **Exercise.** Keep active, regular exercise e.g. walking, does help.

Safe Eating

Now that you are pregnant you may be concerned and somewhat confused about the foods you need to avoid to reduce the risk of food-related illness or infection e.g. Salmonella, Listeria, Toxoplasmosis. During pregnancy it is best to avoid the following foods: -

CHEESE **AVOID** ripened soft cheese e.g. Brie, Camembert, Feta, Lymeswood, Cambozola.

AVOID blue-veined cheese e.g. Stilton, Irish, Danish Blue, Blue Brie, Stilton spread.

AVOID unpasteurised soft & unpasteurised Cream cheese.

N.B. You can still enjoy hard cheese e.g. Cheddar, Edam, etc., as well as cottage cheese, processed cheese, and cheese spreads. Cheese provides calcium so it is important not to avoid these types of cheese. If you are worried about gaining weight too quickly, choose low fat varieties.

MILK **AVOID any unpasteurised** milks e.g. cow's Sheep's and goat's.

EGGS **AVOID** any products containing **raw** or **partially** cooked eggs e.g. home-made mayonnaise, ice-creams and mousses. Manufactured mayonnaise is made from pasteurised eggs and is therefore safe to eat.

Only eat eggs which are cooked until both white and the yolk are solid.

MEATS **AVOID raw** or **undercooked** meat and ensure you wash your hands thoroughly after handling **raw meat**.

N.B. Pre-cooked or ready-to-eat chickens or chicken dishes from delicatessens or supermarkets should be **reheated thoroughly until they are piping hot all the way through** before eating. Never reheat any food twice. If microwaving food, follow manufacturer's instructions carefully, stirring food and allowing time to stand as appropriate.

Store all raw and cooked foods separately in the fridge in covered

containers. Make sure your fridge is working properly and is keeping any stored food really cold. Raw food should be stored on the bottom shelf of the fridge, then if there are any drips, other foods cannot be contaminated.

LIVER See page 14.

SALADS **AVOID** shop-prepared coleslaws. Make your own with manufactured mayonnaise, or by ready prepared sealed tubs and use quickly.

PATE **AVOID** all types.

SHELLFISH These are high risk for food poisoning (unless meticulously prepared at home) and are **best avoided**.

FISH LIVER OILS & SUPPLEMENTS These include Cod Liver & Halibut Oils and multi-vitamins. **AVOID** these because they very rich sources of Vitamin A, a vitamin which if taken in large amounts during pregnancy may be damaging to the baby. Remember, many multivitamins contain Vitamin A. It is best to talk to your doctor before taking **any** medication or supplement.

Other food safety and hygiene tips

- Always purchase food from a reliable source.
- Always wash all fruit, vegetables and salads carefully to remove any soil or dirt.
- Check all "Best before" and "Sell by" dates on food and drinks.
- Wash your hands after handling pets.
- Avoid contact with ewes and lambs during lambing season.
- Avoid handling cat litter.
- Always wear gloves.

Vegetarian mothers

Vegetarian diets can be a healthy way to eat but **very careful planning** is needed to ensure you get all the nutrients your body needs during pregnancy. Special attention needs to be given to foods rich in Protein, Iron, Vitamin B₁₂, Calcium and Vitamin D to meet the extra needs of mother and baby. There is a common misconception that all vegetarian diets are healthy and this may not be true. If protein rich foods are such as lean red meat, fish or chicken are replaced by lots of cheese, nuts and eggs, the diet can be high in fat. Care needs to be taken to ensure adequate protein without a high fat intake.

You may need to consult a Dietitian to ensure your diet is well balanced. For more information on vegetarian diets please read "A Guide to Vegetarian Eating" produced by the Irish Nutrition and Dietetic Institute. (See address at the back of this booklet).

Breastfeeding

When breastfeeding it is particularly important that you eat well as your nutrient needs are **as high or higher** than in pregnancy. Ensuring your diet supplies enough protein, calcium and iron will help to establish your milk supply. Try to have the recommended number of servings for breastfeeding from the food pyramid every day.

Remember:

- Rest.
- Eat regularly. Use the Food Pyramid to plan your meals. If you do not have time to prepare a meal, eat a nutritious snack such as a sandwich and glass of milk.
- Eat to appetite.
- Do not worry about reducing weight in the first few months after giving birth. Wait until you are less tired.
- Drink plenty of fluids (not fizzy drinks), 8-10 cups of water, fruit juice, milk, tea or coffee daily is a good guide.
- Avoid alcohol if possible
- Avoid strong tea or coffee
- Do Not take any medication without first checking with your doctor. If you feel you need a vitamin supplement consult your doctor or dietitian.
- Try to include some light regular exercise.
- If you feel some foods you are eating unsettle your baby, try avoiding them for a few days to see if this helps. Be careful not to exclude several foods for a long period of time without consulting your doctor or dietitian.

FEEDING YOUR BABY

Feeding your baby

During your pregnancy you will want to think about how you are going to feed your baby. You might find it helpful to talk to your doctor or the nursing staff at your prenatal check ups. If you can attend ante-natal ("before birth") classes they will answer a lot of your questions on breast and bottle feeding, as well as prepare you for childbirth and early care of your baby. You might also like to attend a support group such as La Leche League or the Irish Childbirth Trust.

Breast or Bottle? You have a choice

There is no doubt that breastmilk is best. Medical research has shown how perfectly designed it is as a food for infants. Irish mothers are recognising more and more that they have a choice in this matter, and are turning to breastfeeding as the first choice for themselves and their babies.

Nurses and doctors involved in your care are generally very enthusiastic about breastfeeding and the benefits it yields to your baby and yourself.

The idea that you might breastfeed may be new to you. If so, do not be afraid to ask for all the information and support you

need.

You and your partner might like to look through and discuss the benefits of breastfeeding listed here. Generally, fathers are supportive of breastfeeding and happy about the good start it gives their babies.

BREAST FEEDING

The benefits of breastfeeding

- Breastmilk is the natural food for infants to encourage growth and development. Breastmilk changes in composition to meet your growing baby's needs.
- Breastmilk is the most completely absorbed and digestible food for your baby. Breastfed babies rarely become constipated.
- Breastfeeding is hygienic because, unlike other foods, breast milk does not have to be prepared in special equipment which can so easily be contaminated by germs.
- Breastmilk is available at all times. There is no limit to the amount of milk a mother can produce. Supply will meet whatever your baby demands.
- Breastfeeding can promote a feeling of security for baby and a close bond between mother and baby through physical contact.
- Breastmilk helps to protect baby against infections such as Respiratory tract disease, gastroenteritis and ear infections.
- Breastfeeding may reduce the risk of developing allergies like eczema, asthma and skin rashes and general food reactions.
- Breastfeeding may reduce the risk of developing certain diseases such as celiac disease and certain bowel conditions.
- Breastfed babies are less likely to overfeed and become overweight.
- Breastfeeding helps the mother's uterus (womb) to return to its original size, and may delay the return of periods.
- Breastfeeding helps the mother to return to her normal weight after delivery by using up the fats stored in pregnancy.
- Breastmilk is a natural resource and provides a free source of nutrition for infants in the first months of life, when compared to the cost of infant milk formula.
- Premature babies have special needs and breastfeeding provides them with many advantages. Premature babies tolerate their own mother's milk more easily than formula, and it helps to protect them against serious bowel infections, such as necrotising enterocolitis.

Work out which method of feeding is best for you and your child. You and your partner will know your own circumstances and feeling best. It is your choice and whichever you choose, have confidence in your own decision.

Just one important point for first time mothers. If you choose to breastfeed and for some reason cannot continue, you can

easily change to bottle feeding. However, if you decide to bottle feed from the start it is then very difficult to switch to breastfeeding if you change your mind. Whichever way you decide, the information in this book will help answer some of your questions.

Once established, breastfeeding is a pleasure, and many mothers get great satisfaction from being able to provide naturally for their baby's nourishment. Physically and emotionally, it is the better choice for mother and child. However, it may need patience in the early days to establish a satisfactory routine for yourself and your baby. Early problems can usually be overcome.

Preparing to breastfeed – some practical hints

In recent years it has been found that the major cause of nipple soreness is incorrect positioning of the baby at the breast or improper sucking techniques. While there are still some nipple preparation routines that are suggested during the last few weeks of pregnancy, nipple preparation is no longer considered essential for successful breastfeeding.

- The normal washing routine for keeping breasts clean is all that is needed both before and after your baby is born.
- Soap may cause dryness, so use sparingly, if at all, and rinse well.
- The skin of your breasts may become dry during pregnancy. If so, apply an unperfumed body lotion or cream such as lanolin daily.
- When you start to breastfeed, the glands around the nipples secrete a substance which keeps them germ free, so there is no need to use sprays or creams.
- The baby's sucking increases the protective layer (called keratin), of the nipples, and together with good positioning, should ensure comfortable feeding.
- Do not worry about breast size or shape and suitability for Breastfeeding. Most babies manage adequately with whatever nature has provided.
- If your nipples are very small, flat or inverted, you can use breast shields during pregnancy. There are round discs with a hole in the middle which help the nipples to protrude. A nurse or doctor will advise and help you about this. Once you are breastfeeding, the sucking of your baby will help to draw out the nipples.

These steps will make breastfeeding easier when the time comes, and with other measures will help to prevent sore nipples in the early stages of feeding.

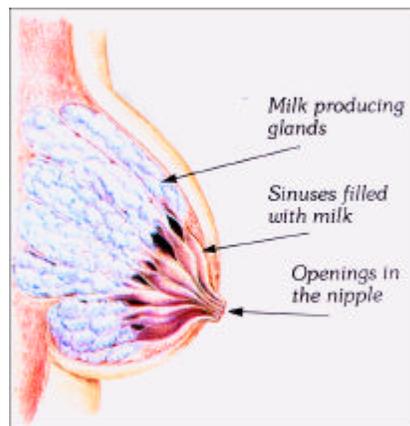
How milk is produced

- Towards the end of pregnancy and for the first few days after birth, your breasts produce colostrums. Colostrum is a protein-rich food particularly suited to newborn babies. It also contains important antibodies which protect your baby against infections.

- Immediately after the birth, hormones circulate round the bloodstream and begin the process of producing milk.
- Following the colostrum you start to produce milk from about the third day after birth. At first it is mixed with colostrums and has a creamy appearance.
- As the colostrum disappears you will see that the breastmilk looks thinner, like skimmed milk. Don't be worried – it has everything your baby needs, with all the right nutrients and protective factors in just the right amounts.

The supply of milk

- When your baby feeds at the breast, a reflex in your body causes milk to be produced. It works on a supply and demand system – the **more often** your baby sucks, the **more milk** is produced.
- When your baby begins sucking, the milk flows down small channels in the breast and through tiny openings in the nipples. The flow of milk, sometimes called the “let down reflex”, can occur even before your baby sucks. Simple things such as the sound of your baby crying can cause milk to flow.
- Feeding works best when you are relaxed. It often happens that after giving birth, mothers feel tired. Do not worry: a few days rest will improve matters and finding comfortable ways to position yourself and your baby, when feeding, will help prevent tension and stress.



At delivery

- Just after a baby is born there is a period when he/she is wide awake with a strong instinct to feed. It is a good idea to hold your baby close to allow feeding even if just for a short time. Studies show that mothers who feed their babies shortly after birth and keep their babies with them (rooming in) have fewer problems and continue breastfeeding for longer.

- When you are in labour you might like to ask those looking after you if they would assist you in holding your baby to your breast after the birth. The sucking is also good for you at this stage, causing your womb to contract and helping it to return to normal size. In some hospitals staff will make a note of your wish, so mention it at an ante-natal appointment when discussing feeding.
- If things do not go exactly as planned, if you feel too exhausted to cope with anything, or if you have medication which makes you and your baby drowsy – don't be discouraged. Even if you have been delivered by Caesarean section, you can still easily begin to breastfeed your baby as soon as you feel able.

Positioning your baby at the breast



Preparing to breastfeed

- Make sure you are comfortable, with your arms and back well supported. A small cushion can be useful to bring your baby to the level of the breast.
- Lay your baby on your arm with its body entirely on its side, baby's tummy to your tummy, baby's head is in the crook of your arm with the nipple directly in front of your baby's mouth, so that your baby doesn't have to turn its head to reach your breast. Your other hand can be used to support and guide your breast, thumb on top and fingers underneath.
- Tickle your baby's lower lip **lightly** with the nipple, until his/her mouth opens very wide.



- Bring your baby to the breast rather than the breast to your baby. Draw your baby close so that he takes a good deal of the brown area (areola), not just the nipple
- Usually your baby will let go of your breast when satisfied. If you want to stop feeding, slide a clean finger into the corner of his/her mouth to break the suction.
- Offer the second breast. Begin the next feed on the side you finished with this time.
- Babies often take in air as they feed, which may be uncomfortable afterwards for some babies. This is often called 'wind'. After a feed, gentle back rubbing with your baby lying against your shoulder, or held a little forward on your lap, may help bring up wind. Have a tissue handy as some milk may also come up – this is perfectly normal.



How often?

- Human milk is very easily digested and in the early weeks breastfed babies need short, frequent feeds. It is a good thing to breastfeed often at this stage. At first your baby may wish to feed every two or three hours. **The more you feed the more milk you will produce for your baby.**

- In the early weeks you and your baby will work out habits and patterns of feeding together. Do not feel that you should be feeding to some strict schedule – a routine will emerge. Watch your baby – not the clock.

In time a pattern will emerge and feeds will normally fall 2-3 hourly around the clock, with one longer gap in a 24 hour period. Night feeds are important in maintaining your milk supply, particularly in the early weeks.

Bottles and soothers

Bottles and soothers can cause “nipple confusion” during the first few weeks when baby is learning to breastfeed. A baby given infant milk formula or water from a bottle or given a soother will feed less often at the breast. As a result your milk supply will fall, reducing your ability to breastfeed successfully.

Is it Enough?

- This is a common worry for some mothers and it can discourage some from continuing to breast feed.
- If your baby is gaining weight steadily, there should be no need to worry.
- The average baby will gain approximately 4-6 ozs/100-150 gms per week.
- You may have your baby weighed at your local health centre from about three weeks old or earlier, if necessary.
- A baby should have at least 6-8 wet nappies a day.
- Breastfed babies have either very frequent small loose motions or very few bowel motions.
- Cigarette smoking may decrease your milk supply and may contribute to baby's slow weight gain.
- If you are concerned about your milk supply, seek help or advise on increasing your milk from your Public Health Nurse or a breastfeeding support group.

Breastfeeding Twins.

When you discover you are expecting twins there are often mixed feelings of joy, surprise and shock. So many of your former plans and decisions are instantly changed. One decision that doesn't need to change is your choice to breastfeed.

As a mother of twins the advantages of breastfeeding are the same as for other mothers – only more so.

- Breastfed babies are healthier as they are protected from

common illnesses. Since twins are often small at birth, they need every health advantage you can give them.

- Breastfeeding can save you time and money – very welcome with two new babies.
- Breastfeeding can make it easier for you to bond with each baby and to meet each baby's needs.

For practical tips and information on breastfeeding positions for twins, talk with your midwife and contact La Leche League for the leaflet "Breastfeeding Twins.

Breastfeeding at home

Getting enough rest

In the first few weeks of life many babies – breast or bottle fed – are unsettled and cry a lot. This can be exhausting. If it happens to you, try to get all the rest you can between feeds. Frequent feeding will ensure that you continue to produce enough milk for your baby.

- Rest is important, particularly for the first-time mother. Get as much rest as you can whenever possible. Accept as much help with housework and shopping as is offered by partners, friends and family, or even organise them to do specific things for you. Rest is not a luxury – it is a positive part of healthy and enjoyable breastfeeding. Father will be anxious to help and it is a very good idea to share the joys and responsibilities of your child right from the beginning. His understanding and help can relieve you of a lot of strain and his close involvement at this time will help him to establish a warm relationship with your baby.

The nurse's visit

When your baby is born, your local public health nurse (PHN) is notified so that she can visit you after you get home. However, this process is sometimes delayed. If you want to make sure of an early visit, get someone to phone or call in at the local health centre before you leave hospital, to arrange a time for a visit.

Do not be afraid to contact the PHN or your local health centre.

If you are in difficulties or in need of advice or reassurance, before or after the birth. You can also talk to other mothers who have breastfed their babies, or contact your local branch of the Irish Childbirth Trust or La Leche League.

Continuing to breastfeed.

The benefits and pleasure of breastfeeding can really be enjoyed once a routine is established. Breastmilk alone is fully adequate until your baby is about 4-6 months of age. Then you can start

to introduce solids gradually.

Many mothers carry on breastfeeding for a year or more – babies enjoy the special time of closeness and security this ensures. Milk supply adjusts to demand so if you wish to reduce breastfeeding to twice a day, or just an evening feed, milk production will adapt to these requirements. Some mothers who are returning to work find this is a good arrangement. If your baby is under twelve months, use formula feeds to replace the breastfeeds you want to cut out.

Ideally, weaning your baby from the breast should be as gradual as possible. For example, you could take about five weeks in all, leaving out the midday feed in the first week, the midday and teatime feeds in the second week and so on. Replace each breastfeed with a cup feed (or bottle feed, depending on the age and needs of your baby). The breastmilk supply will gradually decrease and dry up. Sudden or rapid weaning is not recommended and can lead to problems. If however this becomes necessary or if your baby is reluctant to be weaned, consult your (PHN), local breastfeeding support group or your doctor.

Breastfeeding and working

If you plan to return to work after your baby is born, you may wonder if it is possible to combine breastfeeding and working. Breastfeeding **can** continue after your maternity leave is over. Many working mothers value the special relationship they have with their babies that comes from continuing to breastfeed. It does take some planning however, and there is some practical information you'll need to know.

A leaflet entitled "Breastfeeding and Working" compiled by La Leche League of Ireland is a useful guide for mothers returning to work (see address at back of this booklet).

Managing the feeding routine

Expressing breastmilk

You may wish to draw milk from your breasts for comfort or for storage in bottles, so that someone else can feed your baby if you are away. Preferably this should not be done during the first few weeks. Breastmilk can be kept in bottles in an ordinary fridge and should ideally be used up within 24 hours. It can be frozen for longer storage in a freezer (not freezing compartment of a fridge). Express some milk into a sterile feeding bottle (leaving an inch untitled to allow for expansion) and freeze quickly.

Refrigerated or frozen breastmilk can be warmed quickly before feeding by placing the milk container into a saucepan of hot water. It is not recommended to use a microwave oven to heat human milk. Undetected areas of hot milk can occur which could burn your baby. There are two ways of expressing milk – hand expression or with a breast pump.

Hand Expression



- Make sure that your hands and fingernails are clean and that the container you are using is sterile.
- Cup the breast in your hand, placing your thumb above and your forefinger below at the edge of the brown area (areola), well back from the nipple.
- Pressing inward, towards the chest wall, squeeze thumb and forefinger gently but firmly together. Pull forward but do not let your fingers slide over the skin.
- Rotate your fingers to reach all the milk ducts, using about ten changes of position on each breast.
- If nothing comes at first, vary the amount of inward squeezing and the position of your fingers until you get the knack.
- It may take some time for you to learn how to express properly, so don't worry if there isn't much milk to start with. Spend five minutes at each breast and then repeat.

Use of Breast Pumps



There is a range of breast pumps on the market which may help maintain breastfeeding. It is important that you seek advice on using breast pumps properly.

Feeding outside the home

When your baby is small and you are establishing breastfeeding, you will probably want to take your baby with you when you go out. You can do this easily carrying only a spare nappy – your milk is ready, germ free and warm. With a little practice you can breastfeed so that no-one except you and your baby notices. Two-piece outfits with loose fitting tops are probably the easiest clothes to manage. You can use a shawl over your shoulders or a baby blanket surrounding your baby to allow you

to feed inconspicuously.

You may want to return to work or go out without your baby.

After a few weeks you can prepare breastmilk for bottlefeeding, expressing your milk by hand or breast pump as suggested. All equipment – bottle teats and breast pump – should be sterilised before use. (See **Sterilising** page 49).

Some problems and how to tackle them

Sore nipples

- Prepare your breasts in the later months of pregnancy (See **Preparing to breastfeed** page 30).
- Ensure your baby is **properly positioned at the breast** at every feed with his/her head well supported.
- Remove your baby from the breast carefully, as already described (See page 31).
- Do not use soaps to wash nipples – water is sufficient.
- Try to keep the nipples as dry as possible. Remove any plastic liners from bras as these tend to retain moisture. After feeding, gently rub a few drops of your own breastmilk on your nipples and allow nipples to air dry, especially in the early days.

Good positioning of your baby at the breast is the most effective way of preventing or easing sore nipples. However if you nipples are very sore you may wish to use a small amount of modified lanolin in addition to your own milk to promote healing.

Cracked nipples

- A cracked nipple can be very sore. You may need expert help to reposition your baby at the breast to prevent further damage and promote healing.
- Keep the nipple clean and dry and expose it to the air as much as possible.
- If only one nipple is affected, feed normally on the good side and hand express on the affected side (see hand expression on page 37).
- If your baby has been incorrectly positioned at the breast for some time both nipples can become extremely sore. It may be necessary to discontinue breast feeding temporarily.
- During this time mother should express the milk and give it To baby in a small cup or spoon.
- It is essential to seek expert advice in this situation. Contact your doctor or public health nurse or local breastfeeding

support group.

Engorged breasts

These are breasts which are swollen and tense – this occurs sometimes when milk is first produced, it is only temporary but it is uncomfortable. The following points may help:

- Do not stop feeding but feed more often and encourage your baby to suck well.
- Place a hot wet cloth on your breasts or take a hot bath occasionally *before feeding* to encourage the flow of milk.
- When the breasts are engorged it is often difficult for your baby to grasp the nipple properly until some milk has been expressed – express the excess milk gently.
- Wear a maternity bra until the breasts become softer.
- Between feeds apply cold cloths to your breasts for your own relief.

Sore breasts

Whatever the cause of a sore breast there are three basis rules of treatment to follow:

- Apply heat before feeds.
- Keep the breast comfortably empty by frequent feeding or expression of milk if necessary.
- Get plenty of rest.

Blocked milk ducts

If you notice a tender spot, redness, painful lump or swelling in your breast, it may be due to a blocked duct.

- Apply heat with warm showers, hot wet packs or a heating pad.
- Continue to feed frequently and start every feed with the blocked breast first in order to re-open the plugged duct.
- Get as much rest as possible.
- Gently stroke the tender area with your fingertips, smoothing the milk towards the nipple.
- Consult your doctor or public health nurse or local Breastfeeding support group for advice.

BOTTLE FEEDING

Breast milk is the perfect first food for your baby. However some mothers may decide not to breast feed. If your baby is not being breast fed then you should choose an infant milk formula. Bottle feeding can also be a warm and satisfying experience for you and baby.

Choosing the right infant milk formula

There are different types of infant milk formula. The first group is as follows: -

Aptamil,
Cow & Gate Premium,
Farleys First Milk,
SMA Gold.

These formulae have a high whey content and a low casein content. This means that they contain a good mix of amino acids, the building blocks of protein, which will allow your baby to grow well. These formulae are made from cow's milk which has been modified. Levels of minerals and vitamins make these formulae most suitable for newborn and older infants who are not being breast fed. They can be given to babies up to one year of age.

The second group is:

Cow & Gate Plus,
Farleys Second Milk,
Milumil,
SMA White.

These infant milk formulae contain more casein than whey. They are less suitable for newborn infants but could be used for older babies.

Other infant milk formulae are available, these are called "follow up" milks. They are also made from modified cow's milk with extra iron and vitamins. They are not to be used for infants under six months of age.

These are:
Farleys Follow On Milk,
SMA Progress,
Cow & Gate Step-up,
Forward (Milupa).

In general there should be no reason to change your baby from one "type" of formula to another. If bottle feeding, it is best to keep your baby on an infant milk formula which is suitable from birth to one year. If you are anxious about what you are feeding your baby, get in touch with your health professional, for example your doctor, public

health nurse or dietitian.

Milk from the carton or bottle, or unpasteurised cow's or goat's milk from the farm, are **not** suitable for your new baby. This is because cow's and goat's milk are too high in protein and salt, and very low in iron. Infants fed cow's milk have a higher risk of developing anaemia (low blood iron).

Do not confuse infant milk formula with ordinary skimmed powdered milk.

If you are not breastfeeding then you should feed your baby with an appropriate infant milk formula from birth to one year of age.

Guidelines to amounts of feed your baby may take.

Every baby is different, so the amount of feed taken will vary from time to time. He/she will not always wake up exactly three hours after each feed either – so allow your baby to feed on awakening. Don't expect your baby to finish all of the infant milk formula at each feed.

The table below gives a rough guide to amounts your baby might take:

Age

Birth to 1 month	6 feeds of 3-4 oz each, 90 – 12 ml.
1-2 months	5 feeds of 5-6 oz each, 150 –180 ml.
2-3 months	5 feeds of 6-7 oz each, 180 – 210 ml.
3-4 months	5 feeds of 7-8 oz each, 210 – 240 ml.

Feeding

This is the part to enjoy – a time to cuddle your baby close and get to know each other. Try to make it a time when you sit down, relax and make yourself comfortable.

The feed can be at room temperature or warm to the touch. To warm the feed, put the bottle in a jug of hot water to below the neck of the bottle. Do not let it stand around for longer than an hour like this, as warm milk is an ideal breeding ground for germs. Check that the milk is not too hot by shaking a few drops on the inside of your wrist.

- Feeds should not be warmed in a microwave oven as fluids heat unevenly. This could burn or scald baby's mouth.
- Hold your baby close to you and offer the teat, tilting the bottle to make sure that there is always milk in the bottle neck so that your baby is not swallowing air. For the first few months sit your baby up on your lap two or three times during a feed to allow a burp. Babies do not always have wind so do not try for too long. Have a tissue handy, as they can bring up a little curdled infant milk formula with wind.

- You may need to adjust the size of the hole in the teat. If it is too small your baby will have to work hard to get the infant milk formula and will be windy and hungry.
- Too big a hole may make baby choke and be sick. It should be big enough so that when you turn the bottle upside down the infant milk formula will come out in fast drops. You can make the hole bigger by plunging a red hot needle into the teat and re-sterilising.

Never leave your baby alone with a bottle or be tempted to prop the bottle up as there is a risk of choking. Babies should never be left to bottle feed themselves at any age.

If you choose to give your baby a drink between feeds, try cool boiled water in preference to sweetened drinks, which can damage your baby's teeth (see page 57 Dental health). When baby is a little older and taking food from the spoon you may wish to offer some diluted fruit juice. Remember to make sure that your child does not sleep with a bottle in his or her mouth.

Sterilising bottles and preparing feeds

- You will need six bottles with covers, caps discs and teats and a plastic levelling knife. You can manage with fewer bottles if you do not want to prepare all of the day's feeds in advance.
- You should also have a bottle cleaning brush. Wash this after use, you do not need to put it in the sterilising solution.

There are a number of ways to sterilise feeding equipment:

- To sterilise by **boiling**, you need a large saucepan best kept for this purpose only. The washed equipment is totally submerged in water and boiled for at least ten minutes before use.
- For **chemical sterilisation** you need a sterilisation tank or large plastic container with a lid, a sterilising tablet or solution. All you do is add the tablet or solution to cold water in the container according to the instructions on the packet. Then place your washed equipment in the container, making sure there are no trapped air bubbles in the bottles or teats. Cover, keep all articles submerged and leave to sterilise - ready to be taken out when needed.
- For **steam sterilising** follow the manufacturer's instructions fully. Put washed bottles, caps, teats and water into the container. Once the water has boiled the sterilising will be completed in **about** six minutes, depending on the make.

Cleaning and sterilising

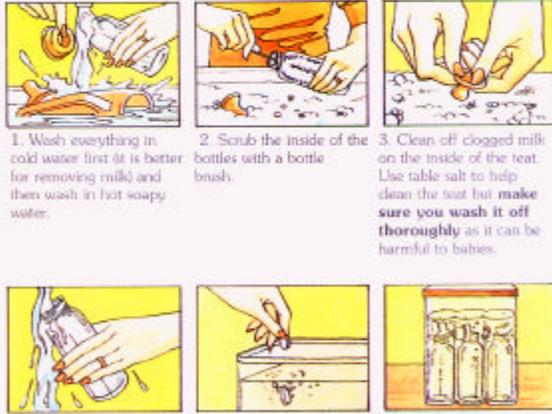
- It is very important that all the equipment is kept very clean.

Germs grow easily in milk and young babies have not had time to build up defences against infection.

- Do not cut down on the cleaning process and rely on sterilisation only – the sterilising solution cannot penetrate milk scum.

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1. Wash everything in cold water first (it is better for removing milk) and then wash in hot soapy water.
2. Scrub the inside of the bottles with a bottle brush.
3. Clean off clogged milk on the inside of the teat. Use table salt to help clean the teat but **make sure you wash it off thoroughly** as it can be harmful to babies.
4. Rinse well in clean running water.
5. Prepare the sterilising solution following manufacturer's instructions.
6. Place the equipment in the solution. Make sure everything is submerged and that there are no air bubbles or trapped air. Leave for the recommended time and take out when needed.

Points to note

- Try to give yourself time to work out a cleaning, sterilising and preparing routine which suits you.
- You can make up feeds singly or for the whole day. Store the feeds in capped bottles in the fridge and do not keep them for longer than 24 hours. If you do not have a fridge, feeds can be made up as your baby needs them.
- Follow the manufacturer's instructions on the tin or packet. Take care to use only one scoop of powder to each fluid ounce (30ml) of water. Use the scoop provided and level it off with a knife. **Never add extra powder to 'thicken' the feed – this can harm your baby.**
- **Never add rusks or rice/cereals to a feed.** It is unnecessary and will over-concentrate the feed: this can lead to dehydration and overweight.
- If your baby does not finish a feed, do not save it for later - throw it away.

- As infant milk formulae contain vitamins and iron you do not need to give vitamin or iron drops to your baby.

Preparing the feed



Some common problems

Crying – breast and bottle fed babies

All babies cry in the early days. It is the only way that baby can let you know he/she is uncomfortable.

This can be very worrying but take comfort in the knowledge that as time goes on it becomes easier for you to understand why your baby is crying.

Here is a checklist of the likely causes.

- *Hunger or thirst.*
- *Wind,*
- *Wet or dirty nappy.*
- *Feeling too hot or too cold.*
- *Feeling frightened or in need of reassurance or company.*

- *Crying for a short time for no obvious reason.*

Excessive crying.

If crying persists after you have checked the above causes, it could be your baby is in pain. This may be caused by colic. With colic your baby has a high-pitched persistent cry and often pulls or jerks up his/her legs. Baby may fall asleep, exhausted, only to start crying again when another attack starts. These bouts of pain often occur at the same time each day.

Colic is very distressing and not always easy to deal with. It may help to rest your baby across your knee or shoulder and gently pat his/her back. This problem usually clears at around the age of three months. **Switching feeds will not help this condition.** See your doctor if you are in any doubt or find it too trying.

Constipation.

Some babies pass several motions each day. Breast fed babies can either pass a small motion after each feed or only one or two motions a week. It is not the frequency but the type of motion that matters. Constipated babies pass small, hard motions with straining or difficulty.

- If your baby is breast fed, feed more often. If bottle fed, give your baby extra drinks of cool, boiled water. There is no need to add sugar.
- Underfeeding may lead to constipation – make sure you are giving enough infant milk formula and fluids.
- Do not add extra infant milk powder to bottles as this will over-concentrate the feeds.
- Never use laxatives for your baby unless prescribed by your doctor.
- Babies' stools vary a lot in colour from yellowish to brown. This is normal. If bowel habits change or baby's stools are Slimy, foul smelling or watery, contact your doctor. Contact your doctor if vomiting and/or diarrhoea occur.

Help is available

You and your baby will have a routine check-up at six weeks after delivery. Some hospitals offer help and advice for a period after your hospital stay. Do not hesitate to go to your local health centre or to contact your public health nurse or doctor if you need advice, help or just confirmation that all is going well.

You will be faced with new situations, especially with your first baby. These health care facilities are provided to help you to deal with any problems or queries which might worry you.

If breast feeding, remember advice is also available from the mother-to-mother support groups run by La Leche League and the Irish Child Birth Trust.

STARTING ON SOLID FOODS

A baby grows and develops very rapidly in the first year of life. The choice of food at this stage is important in order to supply the essential nutrients needed for growth and to introduce your baby to varied diet. Weaning is a time for the new tastes and textures of solid foods to be experienced. Wise selection of food and a relaxed attitude towards feeding can make this an opportunity to learn enjoyable and beneficial eating habits.

Babies vary greatly in their readiness to advance from one stage of feeding to the next. However it is important to introduce a variety of tastes and textures during the first year, at times appropriate to your baby.

Equipment Hygiene

Equipment used for preparing your baby's spoon feeds should be very clean. In the early days of feeding with a spoon it is preferable to sterilise your baby's feeding utensils. A plastic feeding bowl and round-edged plastic spoon are good to use and can be sterilised by chemical sterilisation.

Food Hygiene

Good food hygiene practices are essential when preparing food for your baby. Bacteria will grow quickly in food when it is kept warm for a long time or not thoroughly reheated. These bacteria can cause a tummy upset (vomiting and diarrhoea).

Tips

- Poultry and eggs should be well cooked.
- Always check the "sell by" and the "use by" dates on food.
- Considerable care needs to be taken when using a microwave for reheating foods for babies as it may not reheat food thoroughly. Always read the manufacturer's instruction for using your microwave.
- Do not reheat food more than once.
- Cooked food, if not for immediate use, should always be stored in the fridge.

Remember: if in doubt, throw it out

Some general hints

- It is recommended to breast or bottle feed up to one year of age.
- Previously boiled, cool water is the best drink between feeds.
- Unsweetened, diluted fruit juice can be offered at meal times.
- A friendly calm atmosphere at feeding

time can save a lot of problems later. Choose a day when you are not busy to first try spoon feeding. Baby will need time to get used to this new experience.

- Let your baby's appetite determine the size of the portion. Avoid forcing baby to finish the meal.
- Babies soon want to feed themselves. Let them do this as it is an important step in their development.

However, never leave your baby alone with food because of the dangers of choking.

- Introduce one new food at a time, let baby get used to the taste.
- Be flexible. Your baby is an individual and the food ideas given in this book are just suggestions.
- Use sugar very sparingly – avoid sweet foods and sweet drinks, especially between meals, and at nap or bedtime.
- Never add solids to your baby's bottle.
- Do not add salt to baby's food. Remember that gravies, packet soups and instant sauce mixes contain a lot of salt and should not be used for baby's meals.
- **Low fat milk, skimmed milk or fortified milks should not be given to children under two years of age. Skimmed milk should not be given to under five year olds.**

Looking after your baby's dental health

The arrival of baby's first tooth is always an exciting time and front teeth usually begin to come through the gum between the age of six and twelve months. Over the following two years the remaining "baby" teeth will appear so that by the time your child is 3 years old all 20 baby teeth are present in the mouth. These teeth are very important for eating, talking and smiling, but most of all baby teeth help guide the adult teeth into place.

About sugar and sugary foods

Sugar and sugary foods can be a tooth's worst enemy. They are the most important cause of tooth decay, **especially if taken frequently** as sugar, sweets, biscuits, fizzy drinks and sweetened diluted drinks.

Tips

- Try to keep sugary foods and drinks to

once a day and give as part of, or at the end of meals.

- Avoid all sugar containing liquids in “nap” or bedtime bottles.
- Avoid dipping a soother/teat in sugar, honey or anything sweet to encourage its use.
- Aim to discontinue bottle feeding by your child’s first birthday. As solids are introduced from four to six months of age, your baby will gradually begin to take less infant milk formula. You can continue with breastfeeds or infant milk formula feeds until your baby is one year old. At about seven to eight months of age you can introduce a “teaching beaker” (a baby feeding mug) to your baby.
- Many foods already contain hidden sugars, so try to choose those that contain the least amount. Check food labels – sucrose, fructose, glucose, maltose and syrup all mean sugar. Babies do not have a “sweet tooth” – you do not need to add sugar to home-made baby foods or buy sweetened varieties.
- Special juices are not necessary

Along with limiting foods containing sugar, the cleaning of the infants teeth should begin as soon as the first tooth erupts. Every day wipe the teeth with a clean damp soft cloth. As more teeth begin to appear, use a small soft toothbrush and a small pea size amount of toothpaste with fluoride. It may be a bit difficult at first but your infant will soon become used to the routine. It will be a great help and very important to help protect against possible tooth decay.

Do not allow your infant to eat toothpaste from the tube.

Early stages of weaning to solids

Development

From about 4 to 5 months, your baby’s hand to eye co-ordination is developing. Baby’s head begins to be steadier when sitting up. Baby also wants to touch, hold and taste objects and will smile and make sounds to get attention.

Starting spoon feeds

You usually know when to start as your baby will no longer be Satisfied with milk feeds alone.

There is no advantage in starting spoon feeds (weaning) before four to six months of age as your baby will be getting all he/she needs from breast or bottle feeds. However it is important to start weaning by the age of six months as your baby will need to learn to eat from a spoon. It is best to introduce a very small amount of “first food” at the beginning. Make sure it just drops off the spoon and contains no lumps. You will still be breast feeding or giving about five infant milk formula feeds of about 7-8 oz (210ml – 240ml) at this time . As your baby begins to

manage to take food from a spoon a little better you can gradually increase the amount you give and add less liquid.

You can also begin to introduce new tastes, however do this one food at a time. Each baby is different so take your time and let baby get used to this new way of feeding. Do not be upset if he/she does not accept spoon feeding the first time you try, offer it again in a couple of days time.

First foods

Here are a number of 'first foods' to use in the early stages of weaning.

- Eating apples can be stewed and as they already taste sweet you will not need to add any extra sugar.
- Soft ripe fresh fruit can also be used, e.g. pears or banana, mash well or sieve to remove lumps.
- You can use pureed fresh or frozen vegetables, remember not to add salt when cooking baby's vegetables.
- All cereals, including the baby varieties, must be gluten free until your baby is six months old. Remember all ordinary breads, biscuits and most rusks contain gluten. Each baby food manufacturer is encouraged to label their packets and jars clearly, so look out for 'gluten free' on baby foods.
- Well cooked eggs or meat can be introduced in a pureed form.
- Nutritious home prepared foods are excellent and allow your baby to get used to your own foods from the start. You will need to liquidize them first. This can be done with a liquidizer, hand blender, by pushing the food through a sieve, or by mashing well with a fork.
- Remember foods must be free from lumps at this stage.
- Food can be prepared in bulk, frozen in individual portions and kept in the deep freeze for one month, (not in the freezing compartment of the fridge). Be very careful to defrost carefully.
- Tins or jars of baby food can be very useful, particularly when family foods are too spicy or unsuitable for baby, or when you are travelling. If you use dehydrated baby food from packets, be sure to follow the instructions and make up the food with sufficient water. Food which is left over should be stored in the fridge and used by the end of the next day.
- Choose foods with no added sugar.
- Introduce foods one at a time to allow your baby to get used to the new taste.

The next stage of weaning

Development

From about 5 to 6 months of age baby begins to turn his head

freely and begins to try to help you with his/her spoon feeds.

General Hints

This stage of weaning (one to two months later) sees baby move from sieved or liquidized food to well mashed food. This coincides with normal bite development at about 5 to 6 months of age. Babies who have started on solids at 5 to 6 months old move quickly onto this next stage.

- Remember that baby's food should be gluten free until he/she is 6 months old. Choose a rice based cereal or gluten free rusk for breakfast or tea time.
- Try well mashed potato and vegetable with some sieved or liquidised meat, chopped chicken or fish for dinner. However you must be extremely careful to remove even the very small fine bones from fish.
- At this stage you will still be giving about 4 to 4 breast or bottle feeds daily. Use some of this milk to make up plate feeds.
- You can mix soft fruit into rice made with boiled water or infant milk formula from the bottle.
- You may replace a milk feed with diluted fruit juice at one meal. Use fresh fruit juice diluted with cool boiled water or commercial unsweetened juice – no squash, fruit juice with added sugar, minerals, diet drinks or tea.

Introducing lumpier textures

Development

From about 6 to 8 months baby's teeth will begin to show, now you can mash food less finely and start offering foods which will encourage baby to chew the lumps. Teeth should be brushed or rubbed with a soft, damp clean cloth once they appear.

At this stage in development baby loves being included in family situations, and also begins to learn the meaning of "No".

General Hints

- Try some porridge or breakfast cereal which mixes to a smooth consistency, using expressed breast milk or infant milk formula from the bottle feed. You do not need to add sugar.
- You may now introduce a little cow's milk from the carton or bottle to mix with plate feeds. **Some red meat, which is rich in iron should be included in baby's diet at this stage as this is a time of rapid growth requiring extra iron.**

- Use finely chopped soft meat which is easy to chew, or try lean minced meat mashed with different types of vegetable. Use water from cooked vegetables, or milk, for mixing rather than gravies or packet soups which are very high in salt. Be careful of small bones in meats like chicken.
- Continue to breast feed or use infant formula as your baby's main drink until one year.
- Sometimes pasta, like chopped spaghetti or macaroni, can be offered instead of potato. Add a home made cheese sauce to make a good tea time meal.
- Try to make food look interesting, with different texture, tastes and colours.
- Fish is soft and easy to chew, however you must be extremely careful to remove even the very small fine bones.
- Make sure that eggs are well cooked . Try scrambled egg or you can make up an egg custard with milk.
- Yogurt, fruit or natural, can be poured over mashed soft fruit as a tea time idea. However yogurt containing nuts is best avoided as you baby could easily choke on the nuts.

Introducing finger foods and the training cup/beaker

Development

Babies will begin to crawl or "shuffle" at about 8 to 10 months. You may also see them using furniture to pull themselves into a standing position. Some babies may walk holding on to furniture or your hand, others may be older before they do this. By now baby will be copying what you do and will be looking for attention and approval.

Introducing finger foods will help the development of co-ordination and chewing. Chewing helps develop the muscles that are used for speech.

Ideas for finger foods

- Toast crusts, fingers of brown or soda bread with a little spread and rusks.
- Fish fingers or thin slices of cheese may be exciting tastes for your baby to manage for himself/herself.

Note: Chewing is a learned skill so do not leave your baby with any food until you are sure he/she can chew it and will not choke. **Avoid nuts until your baby is at least six years old** – because of the dangers of choking.

Producing the feeding cup (Training Beaker)

Your baby needs to learn how to drink from a cup, rather than drinking from a bottle. Start with a sturdy plastic cup and make sure that the lid fits well. At the beginning it will spend most of the time upside-down in baby's hand. Some of baby's infant milk formula can be offered in the training beaker. Remember that breast feeds or infant milk formula should be used as your baby's main drink up to one year of age. Diluted fruit juice can be offered at meal times. Tea, fizzy drinks and squashes are not drinks for babies.

Family meals Development

From 10 to 12 months of age baby is assuming his/her place and position in your home. He/She is beginning to understand words and gestures and enjoys playing games like 'hiding' and saying 'boo', or rolling a ball back and forward. He/she may react strongly to strange faces and places. He/she 'reads' pictures in books while on your knee.

Your baby is now ready to enjoy family meals. He/she is also beginning to eat using fingers and may not want help with feeding. You can always give baby his/her own spoon and use a second one to feed him/her yourself.

You can offer bite sized pieces and a variety of tastes and textures which will help baby enjoy "adult" meals.

Weaning advice for vegetarians

A vegetarian/vegan diet can provide all the nutrients your baby needs if it is well planned and varied. It is important to ensure that foods which are acceptable to you as a vegetarian are also suitable for your baby, and will allow for his/her normal growth and development.

Starting on solid foods

For all babies, weaning onto solid food is a gradual process which usually starts at 4-6 months of age. There is no need to start weaning onto a vegetarian diet at a earlier age.

Breastfeeding or infant milk formula should be continued until at least 12 months of age.

Follow the weaning guidelines already given, (see page 59). Suitable first foods include baby rice, pureed fruit and vegetables. The weaning guidelines for vegetarian children are similar to these for non-vegetarians except that meat, chicken, fish and other animal products need to be substituted with vegetarian alternatives (see protein section below). However, special attention must be given to the energy, protein, iron, calcium and vitamin B content of your baby's diet.

Energy (calories)

Because some vegetarian diets can be high in fibre and in bulk infants and young children may fill up easily without eating enough energy-rich foods which are needed for normal growth.

- Offer frequent meals and snacks.
- Use full fat, rather than low fat products.
- Breastmilk and infant milk formula are important energy sources.
- Remember, cereals should be gluten-free to age 6 months.

Protein

Meat, poultry and fish are good protein sources. These foods need to be replaced by other protein sources e.g. pulses, tofu, cheese, yogurt, eggs, together with breastmilk or infant milk formula.

- Cook peas, beans and lentils thoroughly. They need to be pureed or liquidised initially but later can be mashed for your baby.
- Include a variety of pulses e.g. peas, beans, chickpeas, kidney beans, aduki beans and lentils.
- Spreads such as hummus (chick pea spread), tahini (sesame seed spread) and smooth peanut butter are also useful.
- Wholenuts e.g. peanuts **should not** be given to babies or young children as they can easily cause choking.
- Use vegetarian cheeses and soya yogurts if animal products are not acceptable.

Iron

From the age of 6 months an extra source of iron is needed in your child's diet. This can be met by including eggs, pulses, fortified cereals and dried fruit in the diet.

- Vitamin C helps the iron in these foods to be absorbed, so offer fruit (especially oranges, satsumas and kiwis) or citrus fruit juice at the same meal.
- Continue breastmilk or infant milk formula until at least 12 months of age.

Calcium

Calcium is needed for strong bones and teeth. Breastmilk and infant milk formula (including infant soya formula) contain adequate amounts of calcium. However, ordinary soya milks are

low in calcium and are not suitable for infants and young children.

- For older children use cow's milk or a soya milk fortified with extra calcium (check the label). Infant formula, including infant soya formula, can also be used.

Vitamin B

This vitamin is only found in foods of animal origin. Small amounts are found in breastmilk and it is added to infant milk formula. A supplement may be needed if the animal products are completely excluded from the diet.

Further advice on vegetarian eating can be found in the booklet "A Guide to Vegetarian Eating", available from the Irish Nutrition Dietetic Institute.

A range of further educational materials is available on request from
Health Promotion Unit, Department of Health and Children
Hawkins House, Dublin, 2.
Tel: 01 635 4000

Irish Nutrition and Dietetic Institute

Ashgrove House, Kill Avenue, Dun Laoghaire, Co. Dublin.
Tel: (01) 280 4839 Fax: (01) 280 4299

Irish Childbirth Trust

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La Leche League

Breast Feeding Help and Information

Eastern Health Board Area

Deirdre McDonnell	01-4947316
Colette Donnelly	01-8367124
Eithne Carey	01-2868587

Midland Health Board Area

Heather Rice	0502-22746
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Mid Western Health Board Area

Liliane Tehery	061-923170
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North Eastern Health Board Area

Gwen Stewart	01-8351533
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North Western Health Board Area

June Boyd	074-23056
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South Eastern Health Board Area

Mynie Leech 054-44111

Southern Health Board Area

Carmel Moore 021-312736

Western Health Board Area

Cindy Dring 091-555866